Kickapoo Environmental Office

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# The Green Clan

## Tips to Reduce Summer Electric Bills

**Article by Luke Terry, Environmental Director**

- **Keep it clean:** Clean air filters monthly for central air and individual window or wall units. Dirt and dust hinder air flow, reducing efficiency.
- **Program the thermostat:** Give the air conditioner a break during the work day. Shifting the settings to allow higher daytime temperatures could cut the average household's electric bill by $180 a year, according to Energy Star.
- **Avoid chores:** The hotter the space, the harder an air conditioner must work to keep things cool. Limit the use of heat-generating appliances such as the oven, dishwasher and clothes dryer during the daytime hours when temperatures are hottest.
- **Change light bulbs:** Swapping incandescent bulbs for compact fluorescents can cut a home electric bill. Switching one incandescent for a CFL saves $35 in energy costs over the projected 10-year life of the bulb. Not only do CFLs use less energy than conventional bulbs, but they also generate less heat.
- **Close the blinds:** Rooms get hotter without shades or curtains to block the sunlight, especially with insulated window treatments.
- **Use fans:** A breeze makes the room feel a few degrees cooler. Just be sure to turn it off when leaving.
- **Unplug:** Gadgets like cellphone chargers and microwaves suck energy and generate heat as long as they're attached to a power source. Standby power for appliances not in use typically account for 5% to 10% of residential electricity use.
- **Lower the thermostat on your hot water heater to no less than 115 F:** Additionally, try to use less hot water in the bathroom, kitchen and laundry. Reducing the temperature 10 degrees could save as much as $22 a year. Cooler showers feel better during hot summer days.

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## Why Use a Dehumidifier? Article by Luke Terry, Environmental Director

Several serious health issues can be reduced by operating a dehumidifier in your home. The summer months are especially important to keep the basement area dry. As the name sounds, a dehumidifier takes moisture from the air. Dehumidifiers are normally operated in the basement to reduce the chances of mold forming on walls, ceiling tiles and underneath carpet. A basement should be dry and free from odor. If water droplets are present on water pipes then your basement is still humid. Mold can be extremely dangerous to the immune system if exposed over a relatively short period of time. Another reason to have a dehumidifier is to filter dust mites which can cause allergenic reactions. Since 1/2 of our day is spent at home, it's a likely spot in look at if allergies persist.

Internet searches price dehumidifiers in the $50-$250 dollar price range.

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**Kickapoo Environmental Office**
**1107 Goldfinch Rd.**
**Horton, KS 66439**

**Phone: 785-486-2601**
**Fax: 785-486-2445**
**E-mail: rachel.hudson@ktik-nsn.gov**

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## Going Green: Top 10 Household Products to Avoid — life.familyeducation.com

1. Styrofoam cups
2. Paper products and plastic utensils
3. Bleached coffee filters
4. Over-packaged food and products
5. Tropical hardwoods
6. Household cleaners
7. High-octane gas
8. Toys made with PVC plastic
9. Incandescent bulbs
10. Disposable batteries

## Ridding the Environment of Pharmaceutical Waste Not As Easy As It Seems – Viswatej Attili (Tej)

The health implications of polluting the environment weigh increasingly on our public consciousness, and pharmaceutical wastes continue to be a main culprit. Now Aviv University researcher says that current testing for these dangerous contaminants isn't going far enough. Dr. Dror Avisar, head of the Hydro-Chemistry Laboratory at TAU's Department of Geography and the Human Environment, says that, when our environment doesn't test positive for the presence of a specific drug, we assume it's not there. But through biological or chemical processes such as sun exposure or oxidization, drugs break down, or degrade, into different forms — and could still be lurking in our water or soil. Drug products have been in our environment for years, whether they derive from domestic wastewater, hospitals, industry or agriculture. But those who are searching for these drugs in the environment are typically looking for known compounds — parent drugs — such as antibiotics, pain killers, lipid controllers, anti-psychotic medications and many more. "If we don't find a particular compound, we don't see contamination — but that's not true," Dr. Avisar explains. "We may have several degradation products with even higher levels of bioactivity."
Not only do environmental scientists need to identify the degraded products, but they must also understand the biological-chemical process that produce them in natural environments. When they degrade, compounds form new chemicals entirely, he cautions. For the first time, Dr. Avisar and his research group have been working to simulate environmental conditions identical to our natural environment, down to the last molecule, in order to identify the conditions under which compounds degrade, how they degrade, and the resulting chemical products. Among the factors they consider are sun exposure, water composition, temperatures, pH levels and organic content. Currently using amoxicillin, a common antibiotic prescribed for bacterial infections such as strep throat, as a test case, Dr. Avisar has successfully identified nine degradation products with different levels of stability. Two may even be toxic, he notes.

**Source:** George Hunka, American Friends of Tel Aviv University